

Part 1: Project Title & Specifications

GeoVida; **Geographic Visualiser for data** [<http://geovi.da>]

Other considered names: Geovis, Gevida, Geoview, Pioneer.

GeoVida is a Web application that utilises live; open & custom-made data to provide users, businesses & government officials a digital platform to showcase their public (open) or private (closed) data. While allowing a colour-coding system to distinguish between each data entry which can be defined by the user (aka. red = cancelled, financial danger etc). A preview window of additional info (aka website, contact info, manager) for each data entry will be provided. User-integration is provided throughout all open data to provide feedback on open data and help benefit its producer.

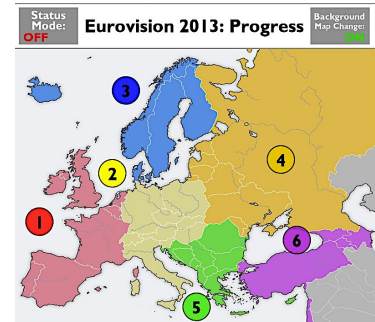


Fig. 1: CC1 App inspiring GeoVida.

Technical Fundamentals:

HTML for web structure; **CSS** for styling; **PHP** for dynamic content & **JavaScript** (optional - dynamic web).

Google Map Integration would be implemented in two visual styles; Default (detailed map) Simple (less focus on road-markings, stronger outlines of country & regional borders). Provided via. Google Maps JavaScript API v3: <http://developers.google.com/maps/documentation/javascript/examples/matype-styled-simple>.

Part 2: Research Question & Analysis

“ An investigation into the visual presentation of Open Data within a Web Browser. ”

• Reasonings for utilising Open Data:

Use of Open Data within the creative & technical industries is a booming new sector to be utilised and showcased and I believe developing its use within my project can provide an interactive yet innovative platform for users to showcase & allow other users to benefit from their projections.

For data to be open; it needs licensed and credit is provided to its original publisher. Open Data for businesses & organisations, allow new forms of transparency between corporation to customer/user. While allowing the user on GeoVida to gain knowledgeable insight into specific aspects of the data's topic in a geographically-placed showcase. Developing the current viewpoint on data handling & visualisation of open data as it's not merely for governments & businesses yet I consider them too.

I intend to open communication with government data resources and begin further analysis of open data through the following agencies and websites; **NISRA** [<http://www.nisra.gov.uk/>], **Data.gov.uk** [<http://data.gov.uk/>] & **EU Open Data** [<https://open-data.europa.eu/en/data/>].

Open Data is a rapidly expanding export and through the following links and through user-production of future map-graphs, I aim to heighten the quality & quantity of open data production.

• How is this achievable onto a Web Browser?

I looked at **Kartograph** [<http://kartograph.org/>] for inspiration of successful use of code to produce visually-appealing geographical visualisations. I will however make sure not to plagiarise both the design or programming aspects that the framework library provides.

Aspects that I wish to replicate:

- Simplistic design of map layouts for specific countries via. vector images which I would implement onto Map-style #2: Simple.
- Use of colour to liven visualisation and provide depth to data.

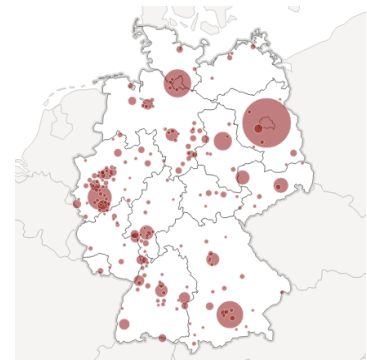


Fig. 2: Ex. Visualisation via. Kartograph.

I intend to base my project on a desktop, web application firstly and to consider later development onto mobile (iOS, Android) afterwards from this semester.

• Reasoning for Project Production:

My aim from my project & report is to provide an innovative platform for users to simplistically & efficiently be able to understand, utilise & produce open data while allowing the user to develop their own skills while allowing research into the advantages of Open data within the digital industry. In the ultimate goal to inspire future web designers, developers & data journalists to support the production of future, innovative web & mobile applications to allow these benefits to reach further.

Part 3: Project Considerations

3.a) User Demographic

For Government Officials:

Innovative, digital platform to showcase Open Data while allowing review & suggestion of change from users of your specified country/region in a visual setting. Easing level of interactivity & transparency between government to public.

For Business Owners:

Easing the communication of company assets & products from CEOs to employees in a simplistic, geographic output. Data can be privatised between employees of choice. Also supporting integration with customers via. feedback.

For Standard Users:

Allowing users to create & share (via. social media) a ranking system of countries been to &/or planning. Can be incorporated to entertainment programmes (aka. Eurovision, World Cup, X Factor). Also, academically for research analysis (i.e. ecology).

Main Demographics: 18 to 35 | M & F | Urban-living | Higher Edu. | Civil servant or Academic

1. **Business-Owners**
2. **University Personnel & Students**
3. **Regional Governments**

3.b) Technical Analysis

My Technical Pros & Cons for **GeoVida**:

Pros:

- Strong Understanding of HTML & CSS
- Recent experience with JavaScript & PHP.
- Ability to link project to Web server & obtain domain URL.
- Foundation application produced to build upon extensively [Fig. 1].

Due to the timeframe that has passed since I have worked with certain programming languages (e.g.. JavaScript/JQuery). I intend to brush up my knowledge via. online tutorials & written sources. I will also re-look the coding for my CC1 assignment to help remind & provide myself with some insight into work-flow structure to help me with GeoVida's planning within my Production schedule.

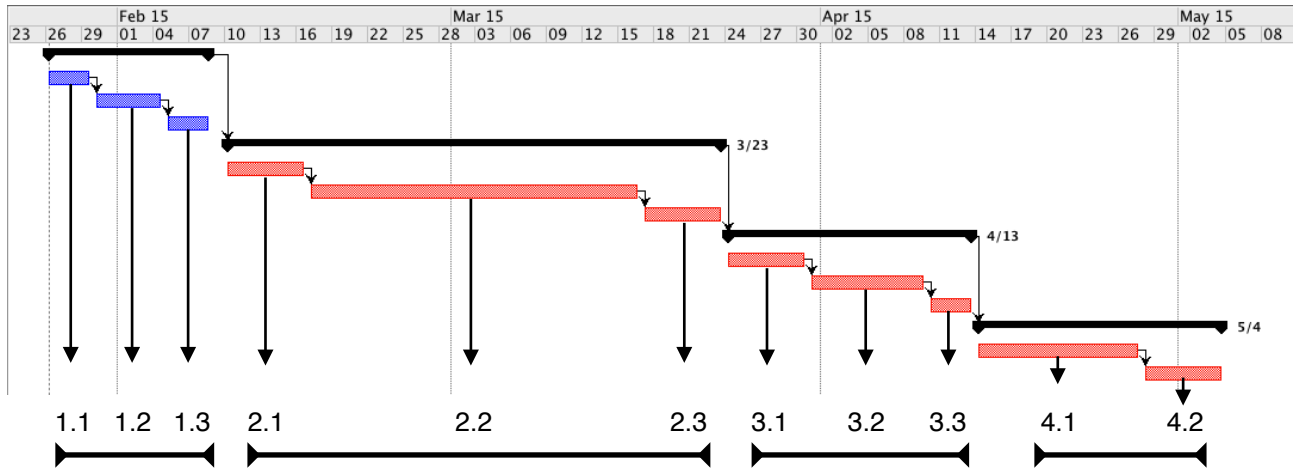
Cons:

- Lack of experience with Open Data utilisation.
- Ability to thoroughly plan successful work-flow for GeoVida.
- Future plans for Implementation onto iOS and/or Android.
- Research needed to provide Export options for data maps.

Regarding the cons I have presented, I plan to spend my time before the start of Semester 2, to alleviate these as fully as possible to make the development of my business project more efficient & better use my time to fix potential obstacles & errors that will present itself during development.

Part 4: Production Schedule

In order to improve efficiency during the 14 weeks of Semester 2 (12 academic, 2 for Easter), I have produced a GANTT chart to help ease development & writing through scheduled deadlines for myself to follow step-by-step throughout the production of my Final Project & Dissertation.



Assignment Topic	No. of Days	Start Date	End Date	Notes:
Project Initialisation	14	1/26/15 8:00 AM	2/8/15 6:00PM	
1.1 Proposal Review	4	1/26/15 8:00 AM	1/29/15 6:00PM	Upon reply of Proposal, implement changes.
1.2 Workflow Production	6	1/30/15 8:00 AM	2/4/15 6:00PM	Produce workflow of technical app structure.
1.3 Resource Preparation	4	2/5/15 8:00 AM	2/8/15 6:00PM	Install & check all software & APIs obtained.
App Development	42	2/10/15 8:00 AM	3/23/15 6:00PM	
2.1 Web = HTML & CSS	7	2/10/15 8:00 AM	2/16/15 6:00PM	Begin front-end structure & styling.
2.2 App = PHP	28	2/17/15 8:00 AM	3/16/15 6:00PM	Main app production. Javascript to be consid.
2.3 Web to App Integration	7	3/17/15 8:00 AM	3/23/15 6:00PM	Checking App placement within website.
App Testing	21	3/24/15 8:00 AM	4/13/15 6:00PM	
3.1 Web Server Utilisation	7	3/24/15 8:00 AM	3/30/15 6:00PM	Activate web server and link with files.
3.2 Debug & Troubleshooting	10	3/31/15 8:00 AM	4/9/15 6:00PM	Main check for internal errors to be solved.
3.3 Web & App Launch	4	4/10/15 8:00 AM	4/13/15 6:00PM	Execute PHP files and check via. website.
Report Finalisation	21	4/14/15 8:00 AM	5/4/15 6:00PM	
4.1 Report Production	14	4/14/15 8:00 AM	4/27/15 6:00PM	Notes taken during previous F.P. weeks.
4.2 Report Evaluation	7	4/28/15 8:00 AM	5/4/15 6:00PM	Check-through, Update & Export for Moderation.
Total [Hours]	980			
Total [Days]	98			
Total [Weeks]	14			